BOOK REVIEWS

A field companion to the butterflies of Australia and New Zealand by Bernard d'Abrera. 1984. 176 pp., illustrated in colour and black and white. Five Mile Press, Canterbury, Victoria. $14.95

According to the introduction in Bernard D'Abrera's latest book on Australian butterflies this volume "is meant to be a highly portable and up-to-date field companion to the true butterflies". This claim reflects the isolation of D'Abrera from the highly active mainstream of Australian butterfly studies today, and my overall response is a mixture of sorrow and anger. It is sad to see such an attractive appearing book so poorly supported by data and so lacking in careful attention to detail (poor layout, poor reproduction, extremely poor editing and numerous errors). My anger is directed at D'Abrera's hypocrisy in claiming (page 5) that the book challenges the lay lepidopterist to make new records and consequently "make a practical contribution to the advance of entomology". Such a comment is difficult to accept from the pen of one who so frequently in this volume ignores the published observations of numerous amateur and professional entomologists (e.g. the life history of *Argyreus hyperbius* was published in 1977–D'Abrera is still claiming that it is unknown).

On the positive side it can be said the volume is indeed compact and rugged and for a large number of butterfly species the illustrations [almost entirely coloured photographs of set (dead) specimens] are quite adequate. Unhappily this is not true for many species in the family Lycaenidae–the family with the greatest number of species in Australia (130). Several species are totally unrecognizable due to poor photographs or poor reproduction: for example both *Anthene* species; *Hypochrysops miskini*–males are purple not blue as shown–and this is true for *H. pythias* and *H. ignitus* males also. Similarly the *Ogyris barnardi* male is shown as bright blue (they are purple) while the bright blue male of *Ogyris zosine* seems more like *O. genoveva* as *zosine* males are a distinct dull purple above. The three large *Arhopala* species are quite unlike the illustrations presented also and one could go on with many more examples. Even more serious is the confusion by D'Abrera of two very different species. *Candalides xanthospilos* is illustrated as *Megisba strongyle* and vice versa!

An unfortunate practice of D'Abrera is to illustrate the Australian species with a subspecies not found in Australia and often quite differently coloured–not a particularly useful approach for a field companion. For example the Australian subspecies of *Delias aruna* (page 42) has nowhere near as much red colour beneath the wings as the New Guinea subspecies illustrated and its most distinctive feature is the orange-yellow colour above, a fact well concealed by D'Abrera.

The habitat illustrations included in this volume, while perhaps welcome, also reflect the general geographical bias in knowledge and interest on southern Australia. Despite the fact that Queensland is the richest area for Australian butterflies only one photograph represents that vast and varied state, while seven photos illustrate D'Abrera's home state of Victoria. The comments on *Appias ada* also reflect the author's lack of recent experience in north Queensland and are quite misleading. Not only is this species well known in the Iron Range and Cape Tribulation area, but its life history has also been recorded in Australia. Further evidence of D'Abrera's armchair approach come from his reference to the Johnstone River as Cape York Peninsula (Innisfail folk please note!). *Catopsilia scylla* is well known from Townsville north and the doubt cast by D'Abrera on Dodd's Kuranda label for this species (p. 53) is quite unwarranted.

Much of the deficiency in this volume may be due to D'Abrera's peculiar reluctance to consult the most recent and authoritative work on Australian butterflies (Common and Waterhouse, 1982). But there are additional weaknesses in the utility of this volume as a field companion. For example on only few occasions is the preferred habitat of a

species identified. There are no illustrations of the juvenile stages despite at least one reference to such an illustration!

Overall this is a clumsily assembled volume of recycled photographs and much irrelevant and misleading material. Despite superficial appearances to the contrary it is not nearly as useful as the field edition of Common and Waterhouse. There remains scope for a thoroughly competent and well designed field guide to the butterflies of Australia to be published.

PETER S. VALENTINE

The Rothschild collection of fleas. The Ceratophyllidae. By Robert Traub, Miriam Rothschild and John Haddow. Published June 1984. 288 pp., plus 151 species distribution maps, 90 plates and 205 figures. Distributed by Academic Press, 24-28 Oval Rd, London NW1 7DX. Price Stg. £60.

Little did Melville realise just how wrong he would be when he wrote "No great and enduring volume can ever be written on the flea, though many there be who have tried it" (*Moby Dick*, Ch. 104). The current volume is essentially a continuation of the 5 volumes of the *Illustrated Catalogue of Fleas (Siphonaptera)*. Researchers have long been aware that the most eagerly awaited part of this Catalogue related to the family Ceratophyllidae. Some 470, or 20%, of the known fleas belong to this family. An urgent need for a revised classification and ready means of identifying these insects necessitated a different approach in this volume from the previous five. The first 36 pages, written by F. G. A. M. Smit, concern classification and constitute extensive taxonomic notes on the family, descriptions of six new genera and eight new subgenera, and a detailed key to all genera and subgenera together with 205 figures. A major section on distribution follows in which are summarised, not only distributions but also host and ecology data under genera and species. Then comes a separate detailed chapter on hosts, another on medical importance of the Ceratophyllidae, and finally five appendices and an index.

Truely, this is a schollarly work of major significance to all seriously interested in fleas. It is, indeed, a text that will endure the passing of time and I commend Miriam Rothschild and Robert Traub for their willingness to privately publish this work. But, perhaps I should add for the benefit of Australian enthusiasts, that I could find no specific listings for Australia. Every other major landmass in the world (including New Guinea and New Zealand) is included in the distribution of at least one species. Do not let this fact, however, deter you from adding it to your library; the importance of its content for Australia is significant.

Advances in insect physiology, Volume 17, edited by M. J. Berridge, J. E. Treherne and V. B. Wigglesworth. Published January 1984. 318 pp., text-figs, tables. Academic Press, 24-28 Oval Rd, London NW1 7DX. Price Stg. £30.

This latest volume contains four major papers: (1) Mechanisms of sclerotization in dipterans, (2) The physiology of insect tracheoles, (3) The endocnine control of flight metabolism in locusts and (4) The neurosecretory-neurohaemal system of insects, plus the usual subject index, and cummulative author and chapter title lists. Following the high standard of preceeding volumes these papers have been written by world authorities in their field and represent essential reading for all scientists interested in these fields of endeavour. Recent research is summarized along with an invaluable synopsis of the primary literature; several hundred key references are listed. If your work involves insect physiology and you are not familar with this Series you should become so without delay.

M. S. MOULDS